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9 10 11 12 13 14
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ring bonds :
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9-10 9-14 10-11 11-12 12-13 13-14
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containing 9 :
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12:Atom 13:Atom 14:Atom 15:CLASS
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Saturation
Number of Carbon Atoms : less than 7
Element Count :
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   N, Exact, 1
Node 7: Limited
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5 L6

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L8
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    ANSWER 1 OF 1 CAPLUS COPYRIGHT 2011 ACS on STN
AN
   2003:58080 CAPLUS Full-text
    138:106603
DN
TΙ
    Preparation of 4-substituted-picolinic acid amide derivatives useful as
    agrochemical fungicides
    Hutin, Pierre; Muller, Benoit; Steele, Christopher Richard; Perez, Joseph;
IN
    Genix, Pierre
PA
    Aventis CropScience SA, Fr.
    PCT Int. Appl., 59 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO.
                 KIND DATE APPLICATION NO. DATE
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   WO 2003006456 A1 20030123 WO 2002-EP8665 20020705 <--
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    US 6953807
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    FR 2001-9195 A 20010711
WO 2002-EP8665 W 20020705
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS

GI

MARPAT 138:106603

AΒ 4-Substituted-picolinic acid amide derivs. (shown as I; variables defined below; e.g. 2-[[(3-(trifluoromethyl)phenyl)amino]carbonyl]-3-hydroxy-4-(imidazol-1-yl)pyridine), process for their preparing, fungicidal compns. comprising them, and a method for treating plants are claimed. For I: Y = -(CR5R6)kCHO, -(CR5R6)k-Het, -(CR5R6)kCH:NQ3 (k = 0-2; Het = 5-6- membered saturated or partially unsatd. or aromatic ring containing 1-3 heteroatoms = N, O, and S which can be identical or different and which can be substituted by one or two -R5; Q3 = -R1 or -OR). G = -(CH2)m-, -O-, -S- and -NR1; Z =-R1, C1-C4 alkylene, C1-C4 alkylyne, -Si(R1)3, -(CH2)p-OMe, -(CH2)p-SMe, -CH202CR1, -C(0)OnR1, (CH2)pC(0)C6H4R1, -C(0)NR1R3, -CH2On(CH2)pC6H4R2,  $S(0) \ge C6H4OR2$  and (CH2)pC6H4OR1. X1 and X2 = H, halogen, -CF3, cyano and nitro; Q1 = -(CH2)q-, -(CH2)qC6H4R4r, pyrazolyl, R4r-substituted cyclohexyl, -(CH2)q(R4r-substituted pyridin-3-yl); Q2 -(0)n-R5, cyano, -On (CH2) jC6H4R5t, -(CH2) jC6H4OnR5, -On (CH2) j(R5t-substituted pyridin-2-yl, pyrazol-1-yl, thien-2-yl), -2-R7-2-R8benzodioxol-5-yl and 2-R5-3-R6-2,3-dihydrobenzodioxin-6-yl. R1 = H or C1-C4 alkyl; R2 = H, halogen, C1-C4 alkyl, C1-C4 alkoxy, C1-C4 haloalkyl and C1-C4 haloalkoxy; R3 = H, C1-C4 alkyl and C1-C4 alkoxyalkyl; R4 halo, C1-C4 alkyl and C1-C4 alkoxyalkyl; R5 and R6 = H, halo, C1-C4 alkyl, C1-C4 haloalkyl; R7 and R8 = H and halo; n is 0 or 1; j, m, p, q and t = 0-4; r is 0-3. In vivo test on Alternaria brassicae (Leaf spot of crucifers) gave good (at least 50%) or total protection at a dose of 500 g/ha with 45 of I. In vivo test on Septoria nodorum (wheat Glume blotch) gave good (at least 50%) or total protection at a dose of 500 g/ha with 38 of I. In vivo test on Erysiphe graminis f. sp. tritici (powdery mildew of wheat) gave good (at least 50%) or total protection at a dose of 500 g/ha with 51 of I. In vivo test on Septoria tritici (Leaf spot of wheat) gave good (at least 50%) protection at a dose of 500 q/ha with 33 of I. In vivo test on Puccinia recondita (Wheat brown rust) gave good (at least 50%) protection at a dose of 500 g/ha with 21 of I. In vivo test on Botrytis cinerea (cucumber Gray mold) gave good (at least 50%) protection at a dose of 500 g/ha with 8 of I. Six example prepns. of I are included as well as several example prepns. of intermediates. For example, 2-[[(3-

(trifluoromethyl)phenyl)amino]carbonyl]-3-hydroxy-4-(imidazol-1-yl)pyridine was prepared via intermediates

4-(imidazol-1-yl)-3-methoxy-2-cyanopyridine (from imidazole and

4-nitro-3-methoxy-2-cyanopyridine) and 4-(imidazol-1-v1)-3-methoxynicotinic acid.

N-(2-(Pyridin-2-y1)ethy1)-3-hydroxy-4-(3-(trifluoromethy1)pyrazol-1-y1)pyridine-2-carboxamide

RL: AGR (Agricultural use); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); BIOL (Biological

study); PREP (Preparation); USES (Uses)
(preparation of 4-substituted-picolinic acid amide derivs. useful as
agrochem. fungicides)

RN 488729-19-7 CAPLUS

CN 2-Pyridinecarboxamide, 3-hydroxy-4-(1H-imidazol-1-yl)-N-[2-(2-pyridinyl)ethyl]- (CA INDEX NAME)

RN 488729-48-2 CAPLUS

CN 2-Pyridinecarboxamide, 3-hydroxy-N-[2-(2-pyridiny1)ethy1]-4-[3-(trifluoromethy1)-1H-pyrazol-1-y1]- (CA INDEX NAME)

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L9 4 L7 NOT L8

=> dis 19 1-4 bib abs fhitstr

- L9 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN
- AN 2010:1071113 CAPLUS Full-text
- DN 153:334035
- TI Preparation of pyrazole derivatives for treatment of COPD
- [N Alcaraz, Marie-Lyne; Briggner, Lars-Erik; Klingstedt, Per Tomas; Loenn, Hans Roland; Nicklasson, Helena; Nixon, Robert Anthony; Watts, Andrew James; Zuban, Robert
- PA Astrazeneca AB, Swed.; Astrazeneca Uk Limited
- SO PCT Int. Appl., 84pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT 1

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     US 20100216843
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PRAI US 2009-154099P
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
    CASREACT 153:334035
     The title compds., i.e., 6-methyl-5-(1-methyl-1H-pyrazol-5-yl)-N-{[5-
AB
      (methylsulfonyl)pyridin-2-yl]methyl}-2-oxo-1-[3-(trifluoromethyl)phenyl]
     - 1,2-dihydropyridine-3-carboxamide 4-methylbenzenesulfonate and other
     pharmaceutically acceptable salts thereof were prepared for the treatment
     of inflammatory diseases, such as COPD. For example,
      6-methyl-5-(1-methyl-1H-pyrazol-5-yl)-2-oxo-1-[3-(trifluoromethyl)phenyl
     ]- 1,2-dihydropyridine-3-carboxylic acid (preparation given) was treated
     with 1,1'-carbonyldiimidazole in acetonitrile at 50 ℃ and then reacted with
      [5-(methanesulfonyl)pyridin-2-yl]methylamine monohydrochloride
      (preparation given) at 50 °C to give the title compound as a free base, which
     was further reacted with 4-toluenesulfonic acid monohydrate for the tosylate
     salt. The title compound, as free base dissolved in DMSO, gave an IC50 value
     for inhibition of human neutrophil elastase activity of 12 nM in human
     neutrophil elastase Ouenched-Fret assay. Formulations containing the title
     compds. as active ingredients were also disclosed.
     1240425-05-1P
     RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (drug candidate; preparation of pyrazole derivs. for treatment of COPD)
RM
     1240425-05-1 CAPLUS
     3-Pyridinecarboxamide,
CN
1,2-dihydro-6-methyl-5-(1-methyl-1H-pyrazol-5-yl)-N-
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     (trifluoromethyl)phenyl]-, 4-methylbenzenesulfonate (1:1) (CA INDEX NAME)
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CM

CRN 104-15-4 CMF C7 H8 O3 S

#### RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 2 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN
- AN 2005:349002 CAPLUS Full-text
- DN 142:373851
- Preparation of substituted quinobenzoxazine analogs as antitumor agents TΙ IN Whitten, Jeffrey P.; Schwaebe, Michael; Siddiqui-Jain, Adam; Moran,
- Terence PA USA
- SO U.S. Pat. Appl. Publ., 453 pp., Cont.-in-part of U.S. Ser. No. 821,243. CODEN: USXXCO
- DT Patent
- English LA

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PΙ	US 20050085468	A1	20050421	US 2004-903975	20040730
	US 7354916	B2	20080408		
	US 7141565	B1	20061128	US 2004-821243	20040407
	US 20060029950	A1	20060209	US 2005-106909	20050415
	US 7507727	B2	20090324		

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                        A1 20061012 US 2006-390810
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 142:373851

GI

AB The present invention relates to quinobenzoxazines analogs I [V = H, halo, NRIR2; A = H, F, N(R1)2; Z = O, S, NRI, CH2; U = OR2, NRIR2; X = OR2, NRIR2; halo, azido, SR2; Rl and R2 in NRIR2 may form a double bond or ring; Rl = H, alkyl; R2 = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R2 = (un)substituted heterocyclyl, (hetero)aryl; W = (un)substituted 1,2-benzo, pyrido, naphthaleno, etc.; and pharmaceutically acceptable salta, esters and prodrugs thereof) which are useful for ameliorating a cell disorder such as cancer. Forty-six synthettic examples showed the synthesis of

<sup>\*</sup> STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

intermediates. E.g., a 4-step synthesis of the fluoroacid II, starting from potassium Bt malonate and 2,3,4,5-tetrafluorobenzoyl chloride, was given. Such prepared fluoroacids were reacted with amines to provide compds. I which were then tested in MTS assay and for inhibition of c-myc mRNA. E.g., the compound III showed 50% inhibition of c-myc mRNA levels at 4  $\mu\rm M$ . The compds. I were tested for antitumor activity in mice (biol. data given for representative compds. I). The compds. I were also claimed as useful for ameliorating a microbial infection.

IT 1056129-88-4

RL: PRPH (Prophetic)

(Preparation of substituted quinobenzoxazine analogs as antitumor agents)

RN 1056129-88-4 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

PAGE 2-A



- OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
- RE.CNT 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L9 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN
- AN 2005:260028 CAPLUS Full-text

- DN 142:316705
- TI Preparation of 2-pyridone derivatives as neutrophil elastase inhibitors and their use for treating inflammation
- IN Andersson, Marjana; Hansen, Peter; Loenn, Hans; Nikitidis, Antonios; Sjoelin, Petter
- PA Astrazeneca AB, Swed.
- SO PCT Int. Appl., 101 pp.
- CODEN: PIXXD2
- DT Patient
- LA English

FAN.	PA:	TENT :				KIND DATE														
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	CN	1882	542			A		2006	1220		CN 2004-80033847						20040915			
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	MX	2006	0027	24		A		2006	0606		MX 2006-2724					20060309				
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	IN	2006	-DN2	107		A3		2006	0418											

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS CASREACT 142:316705; MARPAT 142:316705

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [wherein Y = CH, CF, N; Rl = H, alkyl; R2 = (un) substituted Ph, 5- or 6-membered heteroaryl containing 1 to 4 heteroatoms; Gl = Ph, 5- or 6-membered heteroaryl containing 1 to 3 heteroatoms; each R5 = independently H, halo, CN, alkoxy, NO2, etc.; n = 1-3; R4 = H, (un) substituted alkyl; L = a bond, O, SO, SO2, S, NN, etc.; G2 = (un) substituted monocyclyl, bicyclyl; and their optical isomers, racemates, tautomers, and pharmaceutically acceptable salts] were prepared as human neutrophil elastase (HNE) inhibitors for treating inflammation. Thus, acylation of 4-methylsulfonylbenzylamine\*ICl with 6-methyl-2-oxo-1-[3-(trifluoromethyl)phenyl]-1,2-dihydropyridine-3-carboxylic acid (preparation given), iodination, and Pd-cross coupling of the iodide with phenylboronic acid gave pyridone II. Selected I gave IC50 values for inhibition of HNE activity of less than 30 UM.

IT 848141-11-7P, 6-Methyl-5-(1-methyl-1H-pyrazol-5-yl)-N-[[5-

(methylsulfonyl)pyridin-2-yl]methyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]1,2-dihydropyridine-3-carboxamide

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (USes)

(drug candidate; preparation of 2-pyridones as human neutrophil elastase inhibitors and their use for treating inflammation)

RN 848141-11-7 CAPLUS

CN 3-Pyridinecarboxamide,

1,2-dihydro-6-methyl-5-(1-methyl-1H-pyrazol-5-yl)-N[[5-(methylsulfonyl)-2-pyridinyl]methyl]-2-oxo-1-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)

OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

#### ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L9 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN
- AN 2004:902098 CAPLUS Full-text DN 141:395565
- TI Preparation of substituted quinobenzoxazine analogs as antitumor agents IN Whitten, Jeffrey P.; Schwaebe, Michael; Siddiqui-Jain, Adam; Moran,
- PA Cyclene Pharmaceuticals, Inc., USA
- SO PCT Int. Appl., 438 pp.
  - CODEN: PIXXD2
- DT Patent

LA English

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PI	WO	2004	0915	04	A2 20041028																
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		TD, TG .U 2004229489 A1													•						
	AU	2004	2294	89		A1 20041028 B2 20100304											20040407				
	AU	2004	2294	89		B2		2010		CA 2004-2521810						00040400					
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	BR	IE, SI, LT, L R 2004009105															20040407				
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	NZ	2006522827 543006 2353621				A		NZ 2004-543006						20040407							
	RU	2353	621			C2		RU 2005-134206						20040407							
		2005				A		MX 2005-10776						20051006							
		2005				A		2008	0430			A 2005-					006				
		2006		10		A		2006			KR	20	2005-7019057		057		2	0051	007		
		9446				B1		2010													
		2005						2005										0051			
		2005				A		2007										0051			
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		7612				B2		20091103					2009-KN2283				_				
		2009				A		2009			IN	20	09-1	KN22	83		2	0090	619		
PKAI		2003						2003													
		2003						2003													
		2003				P		2003													
	US	2003	-552	1212		r		2003	1223												

US 2004-821243 A3 20040407 WO 2004-US11108 W 20040407 IN 2005-KN2147 A3 20051031 US 2006-390810 A3 20060328

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS MARPAT 141:395565

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention relates to quinobenzoxazines analogs I [V = H, halo, NR1R2; A = H, F, N(R1)2; Z = O, S, NR1, CH2; U = OR2, NR1R2; X = OR2, NR1R2, halo, azido, SR2; R1 and R2 in NR1R2 may form a double bond or ring; R1 = H, alkyl; R2 = H, alkyl or alkenyl optionally containing one or more non-adjacent heteroatoms selected from N, O, and S, and optionally substituted with a carbocyclic or heterocyclic ring; or R2 = (un)substituted heterocyclyl, (hetero)aryl; W = (un)substituted 1,2-benzo, pyrido, naphthaleno, etc.; and pharmaceutically acceptable salts, esters and prodrugs thereof] which are useful for ameliorating a cell disorder such as cancer. Forty-six synthetic examples showed the synthesis of intermediates. E.g., a 4-step synthesis of the fluoroacid II, starting from potassium Et malonate and 2,3,4,5-tetrafluorobenzovl chloride, was given. Such prepared fluoroacids were reacted with amines to provide compds. I which were then tested in MTS assay and for inhibition of c-myc mRNA. E.g., the compound III showed 50% inhibition of c-mvc mRNA levels at 4 uM. The compds. I were tested for antitumor activity in mice (biol. data given for representative compds. I). The compds. I were also claimed as useful for ameliorating a microbial infection.

IT 1056129-88-4

RL: PRPH (Prophetic)

(Preparation of substituted quinobenzoxazine analogs as antitumor agents)

RN 1056129-88-4 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

PAGE 1-A

PAGE 2-A

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

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